

CLASSIFICATION

CONFIDENTIAL

CONFIDENTIAL

CENTRAL INTELLIGENCE AGENCY  
INFORMATION FROM  
FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT

CD NO.

50X1-HUM

COUNTRY USSR

SUBJECT Economic - Coal mining

DATE OF  
INFORMATION 1949HOW  
PUBLISHED Monthly periodical

DATE DIST. 7 Mar 1950

WHERE  
PUBLISHED Moscow

NO. OF PAGES 2

DATE  
PUBLISHED Jun 1949

LANGUAGE Russian

SUPPLEMENT TO  
REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE  
OF THE UNITED STATES WITHIN THE MEANING OF ESPIONAGE ACT 50  
U. S. C. 31 AND 32, AS AMENDED. ITS TRANSMISSION OR THE REVELATION  
OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PRO-  
HIBITED BY LAW. REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

SOURCE Ugol', No 6, 1949,

50X1-HUM

"DONBASS" COAL-CUTTING COMBINE

Engineers V. N. Khorin, A. I. Bashkov, A. D. Sukach  
Laureates of Stalin Prizes

The "Donbass" combine was designed by Engineers A. D. Sukach, M. F. Gorshkov, and V. N. Khorin and developed by the Donets Affiliate of the State Institute for Planning Coal Machines (Giprouglemash) for the purpose of mechanizing the three basic phases of coal digging -- cutting, shooting, and loading -- in the 0.8- to 1.6-meter sloping coal seams of the Donbass. This combine was introduced at the end of 1948 in Mine No 3-bis of "Chistyakovantratsit" Trust, "Stalinugol'" Combine.

During the test period it was established that the combine can cut coal and reduce it to transportable lumps without blasting.

The new combine increased efficiency in coal mining as follows:

1. Coal mining was increased 30-38 percent over coal digging with a drilling machine and blasting.
2. Heavy physical labor was replaced by skilled labor, reducing the number of workers at the mine face 17-20 percent (mainly for cutters and loaders).
3. Labor productivity at the mine face was increased more than 60 percent.
4. The combine facilitated control of the mine roof and sharply increased safety of workers at the mine face.
5. It mechanized coal digging without radically changing the technology of coal mining.

Designers of the Donets Affiliate of the State Institute for Planning Coal Machines and workers of the Gorlovka Order of Labor Red Banner Plant imeni Kirov

- 1 -

CONFIDENTIAL

CLASSIFICATION		CONFIDENTIAL		DISTRIBUTION									
STATE	<input checked="" type="checkbox"/>	NAVY	<input checked="" type="checkbox"/>	NSRB									
ARMY	<input checked="" type="checkbox"/>	AIR	<input checked="" type="checkbox"/>	FBI									

~~CONFIDENTIAL~~  
CONFIDENTIAL

50X1-HUM

worked in close cooperation to make new combines available for use in mines. The first consignment was dispatched to mines of different types. A number went to Donets basin mines with sloping seams, others went to the Kurnetsk coal basin.

The following conclusions were drawn as a result of productive operation of "Donbass" combines:

1. The "Donbass" combine permitted mechanized mining in most of the Donbass mines having coal seams from 0.8 to 1.6 meters thick, including sloping seams.
2. The performance of the combine is superior to that of the drilling machine even in sloping coal seams. At "Ventilyatsionnaya" Mine No 32 of "Snezhnyanantsit" Trust, in the "Pominsky" h<sub>8</sub> layer, which is 1.23 meters thick and has a dip of 23 degrees, the following results were obtained:

	<u>Drilling Machine and Blasting</u>	<u>"Donbass" Combine</u>
Average daily production during one month (%)	100	268
Productivity per man at the face (%)	100	166

Similar results were obtained in "Gorskaya" Mine No 1-2 of "Pervomayskugol" Trust in the "Grigory" K<sub>3</sub> layer, which is 1.4 meters thick and has a dip of 28-30 degrees.

	<u>Drilling Machine and Blasting</u>	<u>"Donbass" Combine</u>
Average daily production during one month (%)	100	158
Productivity per man at the face (%)	100	147

3. When the work is properly organized, the use of the "Donbass" combine during a one-day mechanized working cycle at a mine face 50-200 meters long can assure the production of 300-400 tons of coal during that period. This capacity is confirmed by operations at the "Dronovstochnaya" K<sub>2</sub> seam, which is 1.2 meters thick. Here, in April 1949, miners working at the 12th eastern face, 250 meters long, of No 3-bis Mine, "Chistyakovantsit" Trust, produced 547 tons of coal daily in a three-shift cycle and the output per worker at the mine face was 12.3 tons.

4. The ST<sub>2</sub>-11 conveyor has been used in connection with the combine. It cannot handle all the coal loaded by the combine and its limited length (not over 100 meters) makes it necessary, as a rule, to set up two and sometimes three conveyers at the mine face. To assure normal work of the combine a powerful new scraper conveyor should be designed in the shortest time possible. This conveyor should have a capacity of up to 100 tons per hour and should be 150-200 meters long.

5. The productivity of the combine is limited by the quality of some of its electrical equipment, in particular by the inadequate capacity of the MA 191/11 main motor and the low quality of manufacture of the switch connections, the controller, and the main motor.

- E N D -

- 2 -

CONFIDENTIAL

~~CONFIDENTIAL~~